Restaurant Management System

We have our family business and we have been working in this area from 20 years ago, now after working for a long time in this field we thought about developing an information system to organize our sales and supply chain operations to improve the performance of our restaurant system, our restaurant is very famous restaurant and fine but is still beyond other fancy restaurants that are computerized. So we need computer program to Challenge the other restaurant to make our system much easier and more precise.

Restaurant management system is somehow like the real paperwork system, the customer request his food order and pay the invoice, and there is an automated system to manage the supply chain for raw material from suppliers.

This information system can be used in any normal restaurant.

The main scenario is as following:

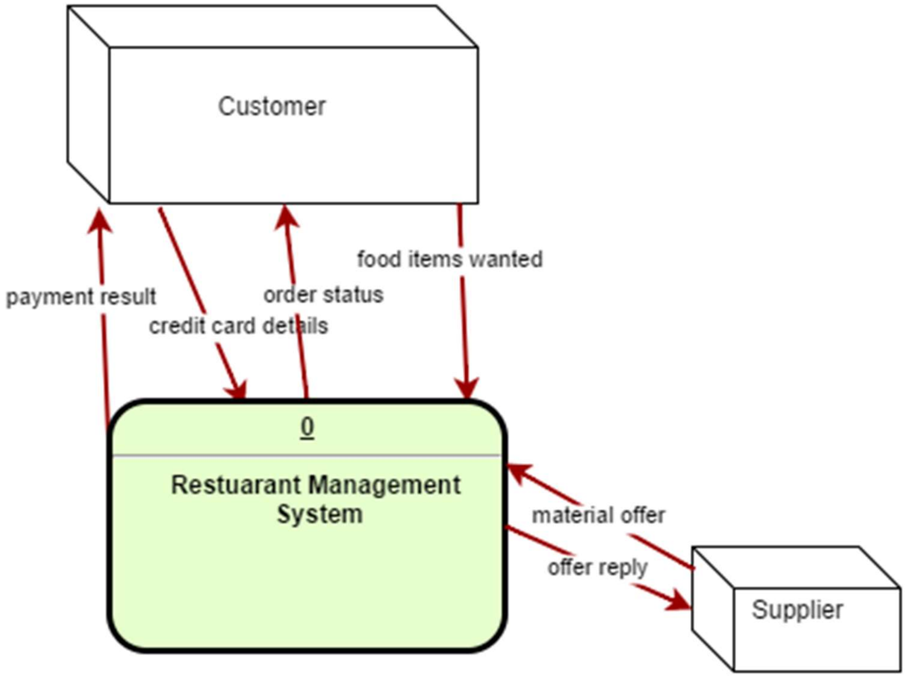
Customer enters the restaurant, choose the food items that he want to, employee asks for invoice, customer pays the invoice, employee record the invoice then tell the cooker to start preparing the food order and when finish it give it to customer.

For the supply chain management, supplier apply for new materials offer (like wheat, ketchup, plastic spoons and classes, etc…), system receives the offer and compare it with the it's database, if offer is good then accept it and update the current materials list up on it.

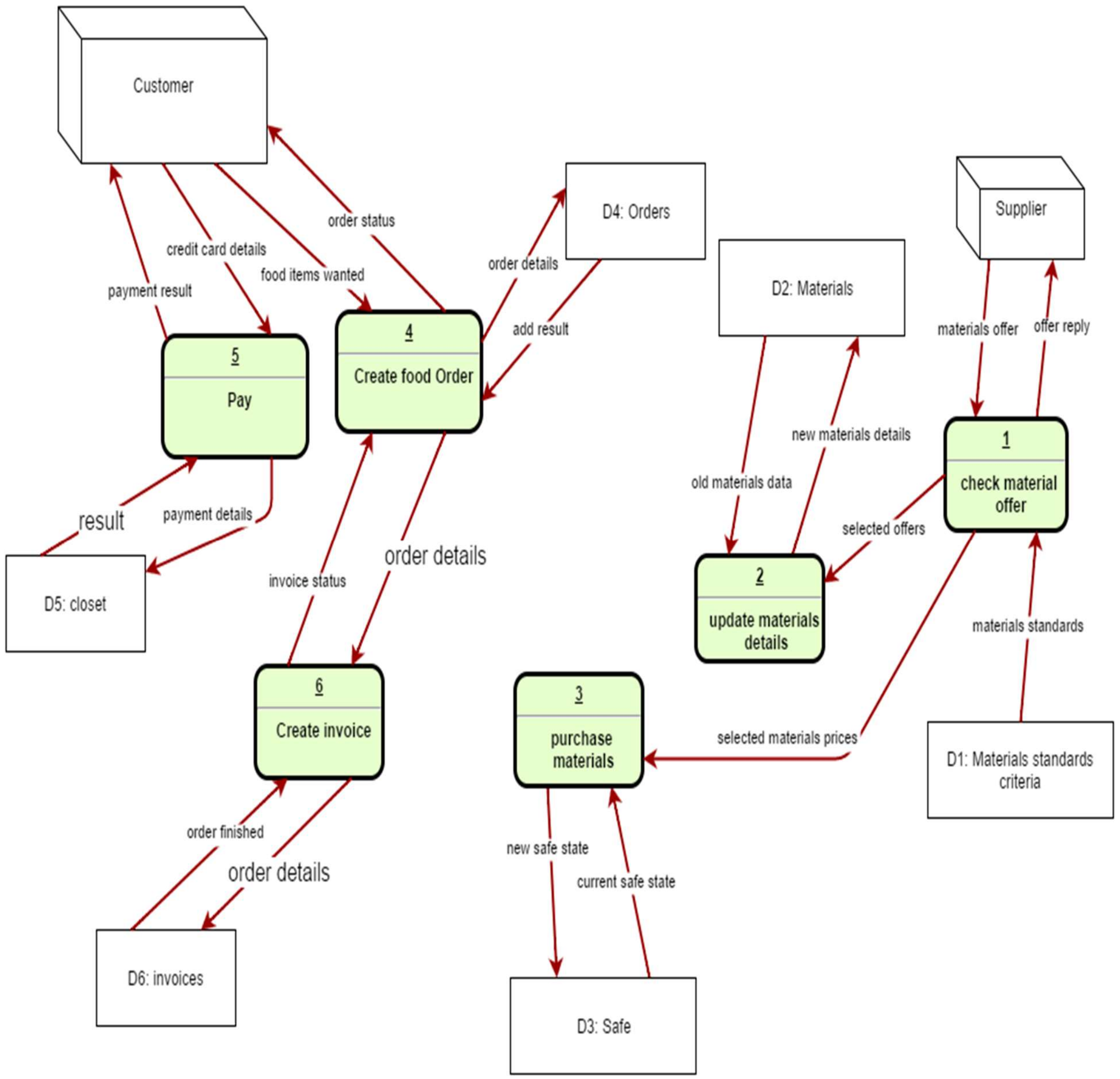
Input of the system is the food orders, payment details, and also the material requests.

Output of the system is the orders invoices and result of material requests.

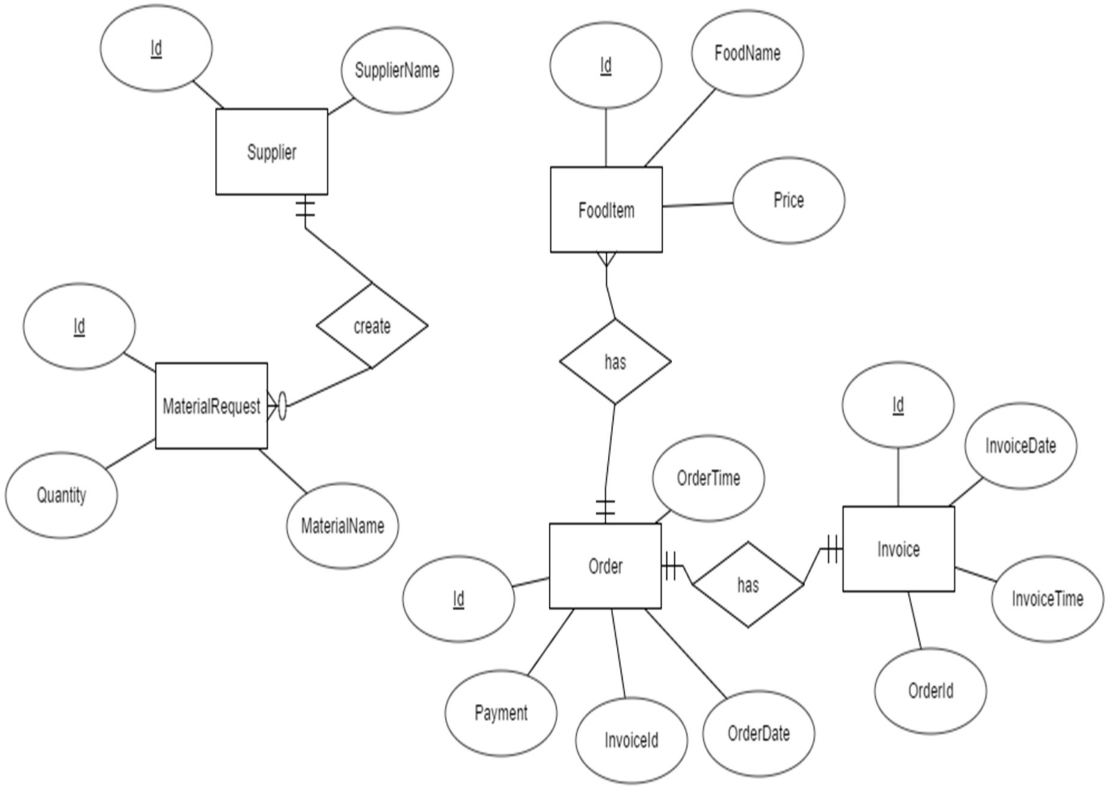
Context diagram:



DFD LEVEL 0 diagram:

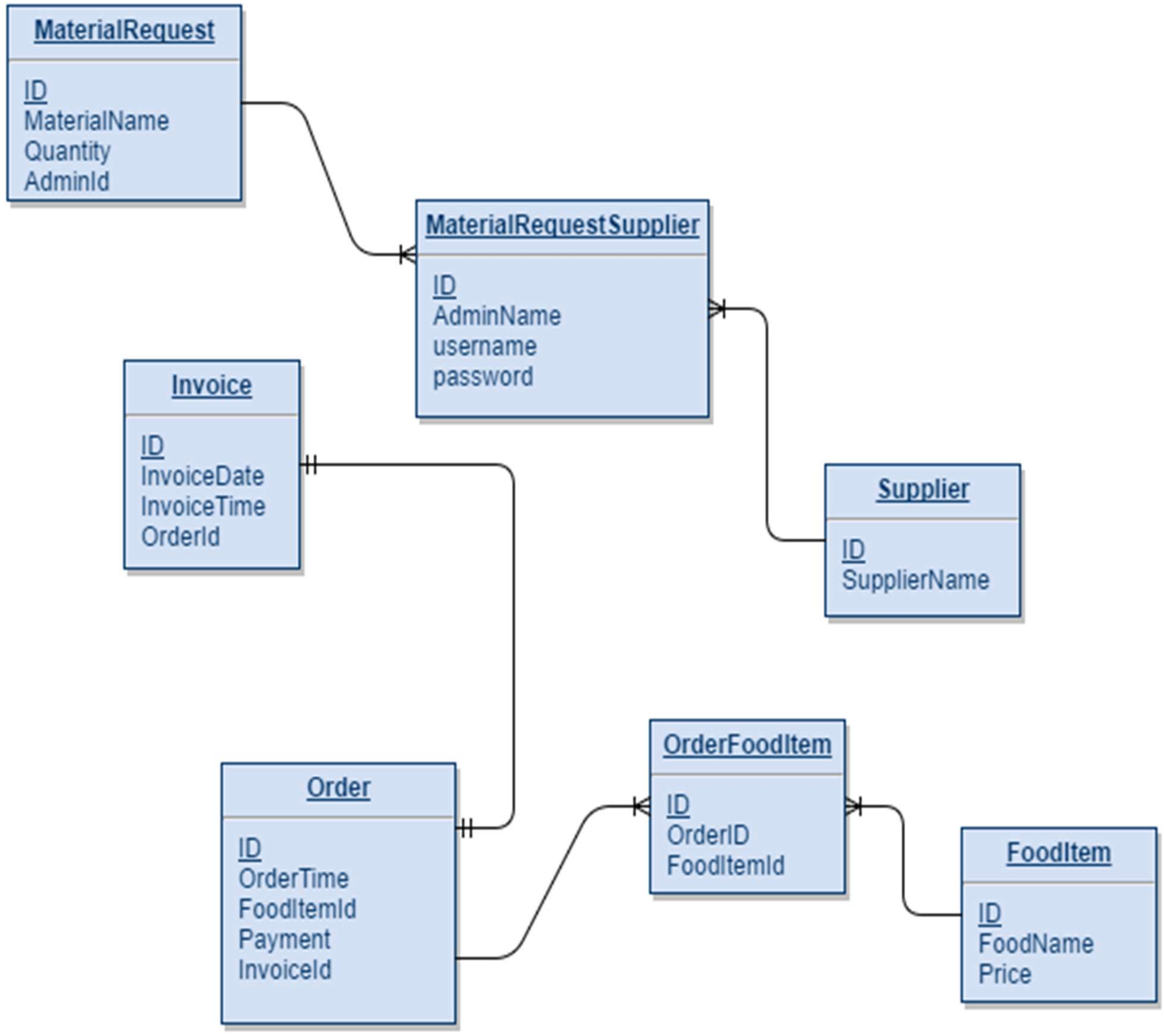


ERD (CDM)



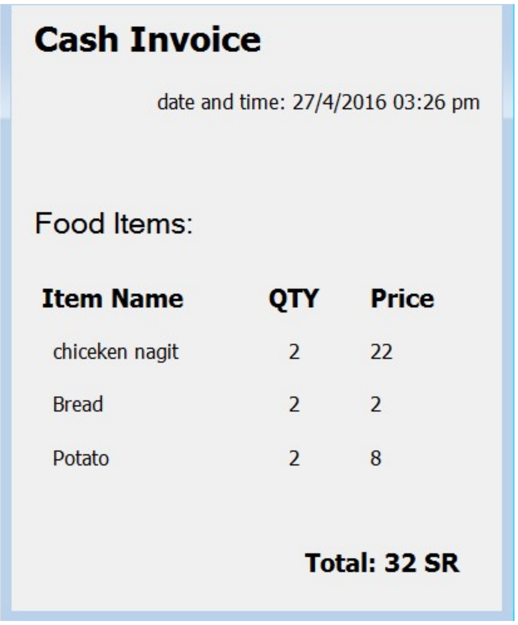
Id
SupplierName
Supplier
create
Id
MaterialRequest
Quantity
MaterialName
Id
FoodName
FoodItem
Price
has
OrderTime
Order
Id
has
Invoice
Id
InvoiceDate
InvoiceTime
OrderId
Payment
InvoiceId
OrderDate

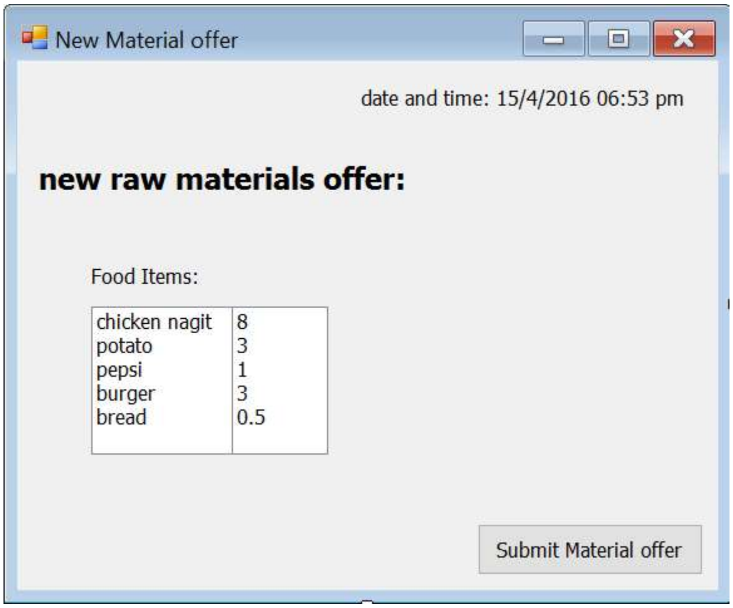
ERD (PDM)


MaterialRequest
ID
MaterialName
Quantity
AdminId
MaterialRequestSupplier
ID
AdminName
username
password
Invoice
ID
InvoiceDate
InvoiceTime
OrderId
Supplier
ID
SupplierName
Order
ID
OrderTime
FoodItemId
Payment
InvoiceId
OrderFoodItem
ID
OrderID
FoodItemId
FoodItem
ID
FoodName
Price

Interfaces

Create Food Order
date and time: 27/4/2016 03:26 pm
order Id: 553
Food Items:
chicken nagit
potato
pepsi
burger
bread
create Order


Cash Invoice
date and time: 27/4/2016 03:26 pm
Food Items:
Item Name QTY Price
chiceken nagit 2 22
Bread 2 2
Potato 2 8
Total: 32 SR


New Material offer
date and time: 15/4/2016 06:53 pm
new raw materials offer:
Food Items:
chicken nagit 8
potato 3
pepsi 1
burger 3
bread 0.5
Submit Material offer